CLAIMS

1. An image signal decoder for decoding an input image signal coded by a hybrid coding method using both intra-frame coding and interframe coding, and selectively using frame processing or field processing for each coding unit, comprising:

a variable length decoding section for performing variable length decoding on said input image signal, and generating motion vector information, coefficient information, time information and header information;

a frame/field processing detection-section for determining whether said input image signal being currently processed is coded in units of frames or in units of fields based on said motion vector information and said coefficient information output from said variable length decoding section;

an inverse quantization section for performing inverse quantization on said coefficient information output from said variable length decoding section;

an inverse DCT section for performing inverse DCT on said inversely quantized coefficient information output from said inverse quantization section;

a motion compensation section for performing motion compensation based on said inversely discrete-cosine-transformed coefficient information output from said inverse DCT section and said motion vector information, and generating a first output image signal;

a frame buffer for temporarily storing said first output image signal output from said motion compensation section;

a field interpolation section for, when said frame/field processing detection-section determines that said input image signal is coded in units of fields, interpolating one of field data of said first output image signal output from said motion compensation section, and generating a second output image signal; and

an output switching section for performing control so that said first output image signal from said motion compensation section is output when said frame/field processing detection-section determines that said input image data is coded in units of frames, and that said second output image signal from said field interpolation section is output when said frame/field processing detection-section determines that said input image data is coded in units of fields.